

Sex should be considered as experimental variable in all studies submitted for publication

August 23 2019, by Harriet Myles



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In an editorial published in the *British Journal of Pharmacology* (BJP), the Editor-in-Chief and Senior Editors have recommended that all future studies published in the journal should formally address sex as an experimental variable.

Citing the growing body of research on [sex differences](#), the editorial highlights that when studies are conducted solely on males, this creates a bias in the data that likely impacts upon future successful translation into the clinical setting. The editorial explains that understanding how sex differences influence physiology and the response to medicines in preclinical research can help ensure a smooth transition from clinical development into practice. It says that if we don't build sex as a variable into [study design](#), this can lead to a scientific and clinical picture that is biased towards males only. The editorial also notes that when both sexes are studied there is potential to minimize the number of animals used for experiments, as many surplus animals bred for scientific procedures will be females.

Editor-in-chief of the *BJP*, Professor Amrita Ahluwalia, summarized the [new policy](#), saying, "This new policy means that the BJP now requires sex to be considered as an experimental variable for all experimental reporting. This will affect the details of the experimental design that are documented or, in the absence of a design incorporating both sexes, a full justification for that approach.

We recommend that all experiments (in vitro, in vivo and ex vivo) should ideally include both sexes, unless there is a specific justification or exemption, such as when using immortalized cell lines or tissue

derived from a sex organ. Our hope is that by requiring a statement upon sex from authors we raise the profile of this important issue within the international pharmacology community."

More information: James R. Docherty et al. Sex: A change in our guidelines to authors to ensure that this is no longer an ignored experimental variable, *British Journal of Pharmacology* (2019). [DOI: 10.1111/bph.14761](https://doi.org/10.1111/bph.14761)

Provided by British Pharmacological Society

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